

# **EXHIBIT 5**

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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
SAN FRANCISCO DIVISION

GOOGLE LLC,

Plaintiff and Counter-defendant,

v.

SONOS, INC.,

Defendant and Counter-claimant.

Case No. 3:20-cv-06754-WHA

Related to Case No. 3:21-cv-07559-WHA

**REBUTTAL EXPERT REPORT OF  
DR. KEVIN C. ALMEROOTH FOR  
“PATENT SHOWDOWN”**

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22           **5.     Sonos's 2005 System Did Not Meet Limitation 1.8**

23           357.    Limitation 1.8 of the '885 Patent requires the “first zone player” to be programmed  
24   with the capability for “after receiving the first and second indications, continuing to operate in  
25   the standalone mode until a given one of the first and second zone scenes has been selected for  
26   invocation.”

27           358.    In my opinion, Sonos's 2005 system did not meet this requirement for multiple  
28   reasons.

1           359. First, as I explained above, the evidence I have reviewed establishes that the  
2 ZonePlayers in Sonos's 2005 system did not have any "zone scenes" capability at all, let alone any  
3 capability to receive the claimed "first indication that the first zone player has been added to a first  
4 zone scene" or the claimed "second indication that the first zone player has been added to a second  
5 zone scene." For these same reasons, the ZonePlayers in Sonos's 2005 system fail to meet either  
6 the "*after receiving the first and second indications*, continuing to operate in the standalone mode  
7 . . ." aspect of limitation 1.8 or the "continuing to operate in the standalone mode *until a given one*  
8 *of the first and second zone scenes has been selected for invocation*" aspect of limitation 1.8.

9           360. Second, even setting aside the other fundamental differences between a "zone  
10 group" and a "zone scene," the evidence I have reviewed shows that a ZonePlayer in Sonos's 2005  
11 system did not have the capability to "continu[e] to operate in the standalone mode" after receiving  
12 an indication that it has been added to a "zone group." Instead, a ZonePlayer in Sonos's 2005  
13 system was programmed such that, after receiving an [REDACTED] message for a "zone  
14 group," the ZonePlayer would automatically transition from operating in "standalone mode" to  
15 operating in accordance with the "zone group" by automatically configuring itself for synchronous  
16 audio playback as part of the "zone group," which would disable the ZonePlayer's capability to  
17 engage in individual audio playback until the ZonePlayer was subsequently removed from the  
18 "zone group." This functionality is confirmed by the Sonos 2005 User Guide, the source code for  
19 Sonos's 2005 system, and my discussions with Mr. Millington.

20           361. Despite the clear absence of this functional capability from Sonos's 2005 system,  
21 Dr. Schonfeld opines in paragraph 263 of his Opening Report that Sonos's 2005 system discloses  
22 claim limitation 1.8 and then sets forth various theories in an attempt to support this opinion. *See*  
23 *Schonfeld Op. Report* at ¶¶ 263-273. However, nothing in Dr. Schonfeld's Opening Report alters  
24 my opinion that the ZonePlayers in Sonos's 2005 system did not have the functional capability  
25 required by limitation 1.8.

26           362. For instance, at paragraphs 266-267 of his Opening Report, Dr. Schonfeld says that  
27 "Sonos argues that having a 'zone scene' that is not automatically activated discloses the limitation  
28 [1.8]" and that "under Sonos's understanding of the claims," the "All Zones-Party Mode" option

discloses limitation 1.8 under the theory that it “exists at all times because it is a default ‘zone scene’ and therefore it exists prior to it being ‘invoked’ as claimed.” Schonfeld Op. Report at ¶¶ 266-267. However, this theory is flawed for several reasons.

363. First, as I explained above, the “All Zones-Party Mode” option is not a “zone scene” as described and claimed in the ’885 Patent. Thus, whether or not the “All Zones-Party Mode” option is “automatically activated” is not relevant to limitation 1.8, which requires the “first zone player” to “continu[e] to operate in the standalone mode” after receiving two different “indications” that it has been added to two different “*zone scenes*.”

364. Second, even setting aside the other fundamental differences between the “All Zones-Party Mode” option and a “zone scene,” Dr. Schonfeld fails to identify any message received by a ZonePlayer in Sonos’s 2005 system that could possibly qualify as a “first indication that the [ZonePlayer] has been added to” the “All Zones-Party Mode” option prior to the time when the “All Zones-Party Mode” option was “selected for invocation,” as required by claim 1 of the ’885 Patent. This failure by Dr. Schonfeld is not surprising because, as explained above, there is no such “indication” that would have ever been received by a ZonePlayer for the “All Zones-Party Mode” option, which was hard-coded into the Desktop Controller and Sonos Controller software.

365. Third, in addition to these flaws with Dr. Schonfeld’s reliance on the “All Zones-Party Mode” option, Dr. Schonfeld fails to identify any “*second zone scene*” to which a ZonePlayer could have been added or any “*second indication* that the [ZonePlayer] has been added to a second zone scene” that would have been received by the ZonePlayer prior to the time when one of the “zone scenes” was “selected for invocation,” as required by claim 1 of the ’885 Patent.

366. Turning to paragraph 268-269 of his Opening Report, Dr. Schonfeld states that “the figures that Sonos relies upon to show this claim limitation was disclosed in the ’885 Patent are very similar to the same user interface used in the Sonos System” and “[t]he user interface of the Sonos System allows Zones to be grouped together (or unground) in nearly the same manner.” Schonfeld Op. Report at ¶¶ 268-269.

367. However, as an initial matter, I fail to this how statement regarding the alleged

1 similarities between the “user interface” for creating a “zone scene” that is disclosed in the ’885  
2 Patent and the “user interface” for creating a “zone group” in Sonos’s 2005 system has any  
3 relevance to whether a ZonePlayer in Sonos’s 2005 system had the functional capability required  
4 by limitation 1.8. Regardless of the user interfaces involved, the relevant inquiry is whether the  
5 claimed “first zone player” is programmed to receive “indications” that it has been added to “zone  
6 scenes” but then “continu[es] to operate in the standalone mode” thereafter until one of the “zone  
7 scenes” is “selected for invocation.” As I have explained elsewhere, the ’885 Patent clearly  
8 discloses this functional capability, which is consistent with one of the fundamental characteristics  
9 of a “zone scene” – namely, that it comprises a “predefined” group of “zone players” that exists in  
10 an inactive state until the “zone scene” is “invoked” at a user’s request. On the other hand, the  
11 evidence shows that, even setting aside the fundamental differences between a “zone group” and  
12 a “zone scene,” a ZonePlayer in Sonos’s 2005 system did not have this functionality capability.  
13 Instead, a ZonePlayer in Sonos’s 2005 system was programmed such that, after receiving an  
14 [REDACTED] message for a “zone group” as a result of a user creating the “zone group” using  
15 the “user interface” of Sonos’s 2005 system (which is the only thing Dr. Schonfeld has identified  
16 as the claimed “indication”), the ZonePlayer would automatically transition from operating in  
17 “standalone mode” to operating in accordance with the “zone group” by automatically configuring  
18 itself for synchronous audio playback as part of the “zone group,” which would disable the  
19 ZonePlayer’s capability to engage in individual audio playback until the ZonePlayer was  
20 subsequently removed from the “zone group.”

21 368. I also disagree with Dr. Schonfeld’s statement that the “user interface[s]” are “very  
22 similar” or that they allow “Zones to be grouped together (or ungrouped) in nearly the same  
23 manner.” These two “user interfaces” are used to facilitate grouping of “zone players” in two  
24 distinctly different manners. In particular, the “user interface” of the ’885 Patent is designed to  
25 allow a user to create a “zone scene” comprising a customized group that is “predefined” and  
26 “previously saved” in advance of being activated so that it is available to be activated at some later  
27 time at a user’s request, whereas the “user interface” of Sonos’s 2005 system was designed to  
28 allow a user to create a “zone group” that is automatically activated at the same time that it was

1 created such that the ZonePlayers in the “zone group” automatically configure themselves for  
2 synchronous audio playback as part of the “zone group.”

3 369. Turning next to paragraph 270 of his Opening Report, Dr. Schonfeld states as  
4 follows:

5 Further, as discussed above, Sonos has taken the position that “standalone mode”  
6 includes having a zone player not playback any media. *Supra*. In the normal course  
7 of using the Sonos System, “any zones you link will automatically drop their  
8 current music queue and begin to play the music queue from the highlighted zone.”  
9 However, “if you select link zone from a zone where there is no music playing, any  
zone you link to it will also be silent.” Accordingly, silent zones may remain in  
standalone mode even when added to different groups if the groups that they are  
added to are silent and depending on the order in which they are added to that group.

10 Schonfeld Op. Report at ¶ 270. However, this theory is premised on a misleading and inaccurate  
11 characterization of the “standalone mode” limitation of claim 1 of the ’885 Patent.

12 370. Contrary to Dr. Schonfeld’s suggestion, the “standalone mode” limitation does not  
13 simply refer to a “zone player” that is “silent.” Rather, the “standalone mode” limitation requires  
14 to a particular “mode” of operation a “zone player” in which the “zone player” is “*configured to*  
15 *play back media individually*” as opposed to being configured to play back media as part of a  
16 group. In other words, the “standalone mode” limitation requires the “zone player” to be operating  
17 in a “mode” in which the “zone player” is currently configured to play back media by itself, as  
18 opposed to being currently configured for synchronous playback as part of an activated group,  
19 such that the “zone player” is currently available to be used for individual audio playback without  
20 first modifying its grouping status. When applying this proper interpretation of the “standalone  
21 mode” limitation, there is no dispute that the ZonePlayers in Sonos’s 2005 system did not  
22 “continu[e] to operate in the standalone mode” after being added to a “zone group.” To the  
23 contrary, a ZonePlayer in Sonos’s 2005 system was programmed such that, after receiving an  
24 [REDACTED] message for a “zone group” as a result of a user creating the “zone group,” the  
25 ZonePlayer would automatically transition from operating in “standalone mode” to operating in  
26 accordance with the “zone group” by automatically configuring itself for synchronous audio  
27 playback as part of the “zone group,” which would disable the ZonePlayer’s capability to engage  
28 in individual audio playback until the ZonePlayer was subsequently removed from the “zone

1 group.”

2 371. Turning lastly to paragraphs 271-273 of his Opening Report, Dr. Schonfeld sets  
3 forth a theory that limitation 1.8 could be met in a scenario where a ZonePlayer in Sonos’s 2005  
4 system (i) was first added to and then dropped from a first “zone group,” (ii) was next added to  
5 and then dropped from a second “zone group,” which caused the ZonePlayer to be in “standalone  
6 mode,” and (iii) was thereafter add to a new “zone group” having the same group membership as  
7 either the first “zone group” or the second “zone group.” Schonfeld Op. Report at ¶ 271-273.  
8 However, this theory likewise fails for several reasons.

9 372. First, because “zone groups” are not “zone scenes” for all of the reasons explained  
10 above, this scenario fails to meet either the “*after receiving the first and second indications,*  
11 *continuing to operate in the standalone mode . . .*” or the “. . . continuing to operate in the  
12 standalone mode *until a given one of the first and second zone scenes has been selected for*  
13 *invocation*” aspects of limitation 1.8.

14 373. Second, this theory is premised on an incorrect interpretation of limitation 1.8’s  
15 requirement that “after receiving the first and second indications,” the “first zone player”  
16 “*continu[es] to operate in the standalone mode until a given one of the first and second zone*  
17 *scenes has been selected for invocation.*” In particular, in the context of the surrounding claim  
18 language and the ’885 Patent’s specification, a POSITA would understand this claim limitation to  
19 require functionality whereby the “first zone player” does not automatically transition out of  
20 “standalone mode” in response to receiving either the “first indication” or the “second indication.”  
21 In other words, a POSITA would understand this claim limitation to require functionality whereby  
22 neither “first indication” nor the “second indication” serves a trigger that causes the “first zone  
23 player” to transition out of “standalone mode.” And under this proper interpretation, a POSITA  
24 would not consider limitation 1.8 to be met by a scenario where a ZonePlayer in Sonos’s 2005  
25 system does automatically transition out of “standalone mode” in response to receiving a  
26 [REDACTED] message for a “zone group” and is then subsequently placed back into  
27 “standalone mode” at some later time by virtue of a user removing the ZonePlayer from the “zone  
28 group” and thereby destroying the “zone group.” Rather, the ZonePlayer in such a scenario *stops*



1 operating in the standalone mode after receiving the [REDACTED] message (which is the only  
2 thing Dr. Schonfeld has identified as the claimed “indication”) then begins operating in the  
3 standalone mode again at a later time, which is distinctly different from “*continu[ing]*” to operate  
4 in the standalone mode.”

5 374. Thus, nothing in Dr. Schonfeld’s Opening Report alters my opinion that a  
6 ZonePlayer in Sonos’s 2005 system did not have the functional capability required by limitation  
7 1.8.

1 my opening report.

2 1086. I have also reviewed Sonos's Technology Tutorial that provides an overview of the  
3 '885 Patent, which I understand was submitted to the court in February 2022. I incorporate by  
4 reference herein Sonos's Technology Tutorial and expressly reserve the right to use the  
5 Technology Tutorial in whole or in part as a demonstrative to assist in my testimony.

6 **XVIII. RESERVATION OF RIGHT**

7 1087. I reserve the right to further expound on my opinions regarding the validity of claim  
8 1 of the '885 Patent in subsequent declarations, reports, and/or at trial.

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11 Dated: July 27, 2022

  
By: \_\_\_\_\_  
Kevin C. Almeroth